

A CASE REPORT OF ACNE VULGARIS (*BUSOORE LABANIYA*): TREATED BY UNANI FORMULATION

Nazreen Fatma¹, Musab Ahmad¹, Mohammad Zaki Ahmad², Mohammad Tarik¹, Mohd Imlaque³

¹PG Scholar, Department of Moalajat (Medicine), National Institute of Unani Medicine, Bengaluru, India
560091,

²PG Scholar, Department of Ilaj Bit Tadbeer, National Institute of Unani Medicine, Bengaluru, India 560091,

³PG Scholar, Department of Tahaffuzi wa Samaji Tib, National Institute of Unani Medicine, Bengaluru, India
560091.

Abstract

Acne vulgaris is one of the most common skin diseases in the world which affects all races and ethnicities. The highest incidence of acne exists in adolescence where 80% of all teenagers can be diagnosed with it. Occurrence is very common, affecting approximately 85% of young people. Usually its onset occurs during puberty or may appear around 25 years or older. Severity is more in males than females, lower incidence in Asians and Africans. In Unani System of Medicine, Acne (*Busoore Labaniya*) is small eruptions on the nose and cheeks which is white in colour, resembling a drop of milk. Its *Usool Ilaj* (principle of treatment) is evacuation (*istefragh*) of phlegm from the body and brain, along with this deobstruent (*mufatteh*), detergent (*jali*) and resolvent (*mohalil*) drugs are also given.

The present study was planned to enlighten the use of Unani formulation in the treatment of acne vulgaris (*Busoore Labaniya*). We reported a 25 year old female suffering from acne vulgaris, who came with complain of painful eruptions on her face. She was treated with a polyherbal Unani formulation (*Zimad-e-Muhasa*).

Keywords: Acne vulgaris; *Busoore Labaniya*; *Istefragh*; *Mufatteh*; *Zimad-e-Muhasa*.

Introduction

Acne vulgaris is a pilosebaceous unit chronic inflammatory disease. Clinical lesions are open- and closed non-inflammatory comedones and/or papules, pustules and nodules of varying degrees of inflammation and depth. The face, back and/or chest are the most frequently affected sites. Post-inflammatory macules, pigment changes and scarring commonly occur. Follicular plugging (comedone) prevents drainage of sebum, androgens stimulate sebaceous glands to produce more sebum. Bacterial lipase converts lipids to fatty acids and produces proinflammatory mediators, which lead to an inflammatory response. Distended follicle walls break, sebum, lipids, fatty acids, keratin and bacteria enter the dermis, provoking an inflammatory and foreign-body response. Intense inflammation leads to scars. (Wolff K et al, 2017; Griffiths CEM et al, 2010) It is a polymorphic disease, which occurs predominantly on the face (99%) and, to a lesser extent, occurs on the back (60%) and chest

(15%). Although it is usually a condition of adolescent, acne affects 8% of 25-34 year olds and 3% of 30-44 year old age group.(Kaminer MS and Gilchrest BA, 1995; Hunter J et al, 2002)

In Unani system of medicine, acne vulgaris is termed as *Busoore Labniya*, *Mohasa* or *Keel*. In his book, Canon of Medicine, the renowned Unani physician, *Ibn Sina* says that *Mohasa* are tiny white eruptions on the nose and cheeks that mimic condensed milk drops. The etiology is considered *Madda Sadeediya* (suppurative material), which comes to the skin surface due to the body's *bukharat* (vapours) and is not resolved in the skin because of its viscosity.(Sina I, 2010; Tabri AM, 1997) The other factors are indigestion, constipation, irregularities of menstruation and use of hot and spicy diet.(Jilani G, 1749; Ajmali MM, YNM) *Busoore Labaniya* is characterized by small, white eruptions, which resemble the drop of milk. When these lesions are opened a solid, yellow colour substance comes out which resembles the solidified *ghee*. The face has an inflamed look.(Tabri AM, 1997; Jilani G, 1749; Arzani HA, 2005)

Case Report

A 25 year old female who has been suffering from acne vulgaris from 3 years, came to hospital with complain of painful eruptions, affecting mainly cheek. From medical history there were no data about disturbances in her menstruation, she had regular cycles and she had no pregnancies. She had negative family history for acne vulgaris. History of taking Homeopathic and Allopathic treatment was present but none was successful to cure it. She was used to of cosmetics for fairness. She took lots of antibiotics and anti-acne cream prescribed by the Dermatologist for 2 years. Dermatological examination showed multiple papulo-pustular lesions over face. Under Magnifying glass there were multiple black head and white head comedons (cardinal feature of acne vulgaris).The patient was treated according to the principles mentioned in classical books of Unani Medicine. Unani drug *Zimad-e-Muhasa* was given for local application in the form of *Zimad* (Paste). She was advised to apply the 6-10 gram of it on the affected area once at night and then wash with lukewarm water in the morning. Ingredients of *Zimad-e-Muhasa* were *Irsa* (*Iris florentina*), *Barge Neem* (*Azadirachta indica*), *Poste Saras* (*Acacia speciosa*), *Ghungchi Safaid* (*Abrus precatorious*) and *Namake Sambhar* (Lake salt).(Arzani HA, 2005) The patient was followed every 15 days, and photographs were taken before and after treatment. As a result of the treatment at the end of 2 months, improvement was observed. The eruptions on the face and back were diminished in number and nearly clear skin was seen. No adverse effects were reported during the treatment.

Discussion

Improvement in the patient may be due to pharmacological activities of the ingredients of *Zimad-e-Muhasa*. These herbs have *muhallil* (anti-inflammatory), *jali* (detergent), *jazib* (absorbent), *murakhkhe* (emollient), *daafe ta'afun* (antiseptic) properties, which are effective in acne vulgaris.(Ghani N, 2010; Anonymous, 2003; Basu KR, 2004; Gopal MG and Farahana B, 2001; Sachidanand YN and Kumar AB, 2001) Antibacterial, anti-inflammatory, antioxidant, wound healing and skin regeneration effects on animal models were tested for

Azadirachta indica leaves.(Kumar N et al, 2012; Balakrishnan KP et al, 2011; Dinda A et al, 2011; Patel P et al, 2011; Vijaya VT et al, 2012; Kamlesh JW, 2009) Experimental studies on seeds of *Abrus precatorius* have confirmed the activity of anti-inflammatory , antimicrobial, wound healing, antioxidant and immune stimulants.(Anam EM, 2001; Bobbarala V and Vadlapudi V, 2009; Alagesaboopathi C and Sivakumar R, 2011; Pal RS et al, 2009; Tilwari A et al, 2011)

A clinical trial was carried out by Tabasum H on the patients having acne vulgaris by *Zimad-e-Muhasa* showed remarkable results.(Tabasum H et al, 2016)

Conclusion

Zimad-e-Muhasa is safe and effective in the treatment of acne vulgaris (*Busoore Labaniya*). It showed remarkable response, its limitations include small population and less duration. Therefore, studies on large sample with long duration and long follow-up period need to be carried out for further exploration of efficacy and safety of *Zimad-e-Muhasa*.



Before Treatment

After Treatment

References:

- Ajmali MM. Khooni Amraz ka ilaj. New Delhi: Tibbiya collage. YNM; pp. 77.
- Alagesaboopathi C, Sivakumar R. Studies on wound healing activity of red and black coloured seed, white coloured seed extracts of *Abrus precatorius* L. International Journal of Pharma and Bio Sciences. 2011; 2(1).
- Anam EM. Anti-inflammatory activity of compounds isolated from the aerial parts of *Abrus precatorius* (Fabaceae). Phytomedicine. 2001 Jan 1;8(1): 24-7.
- Anonymous. The Wealth of India. Vol 1st, 5th. Delhi:National Institute of Science Communication and Information Resources; 2003; pp. 6, 10-12, 107-10, 254-56.
- Arzani HA. Tib e Akbar. (Urdu translation by Hakim Mohammad Hussain).New Delhi: Idara Kitabul Shifa. 2005; pp. 673-674.
- Balakrishnan KP, Narayanaswamy N, Subba P, Poornima EH. Antibacterial activity of certain medicinal plants against acne-inducing bacteria. Int J Pharma Bio Sci. 2011; 2(3): 476-81.
- Basu KR. Indian Medicinal plants. Vol 2nd, 3rd, 4th, 10th. Haridwar: Uttaranchal Oriental Enterprises. 2004; pp. 745- 50, 1068-70, 1285-95, 3397-400.
- Bobbarala V, Vadlapudi V. *Abrus precatorius* L. seed extracts antimicrobial properties against clinically important bacteria. International Journal of PharmTech Research. 2009; 1(4): 1115-8.
- Dinda A, Das D, Ghosh G, Kumar S. Analgesic and anti-inflammatory activity of hydro-alcoholic extract of *Azadirachta indica* leaf. Pharmacologyonline. 2011; 3: 477-84.
- Ghani N. Khazainul advia (Encyclopedia of Eastern Medicine). New Delhi: Idara Kitabul Shifa. 2010; pp. 305, 799, 1319, 133.
- Gopal MG, Farahana B. Effectiveness of herbal medications in the treatment of acne vulgaris – a pilot study. The Indian Practitioner 2001; 54: 10, 723.
- Griffiths CEM, Barker J, Bleiker T, Chalmers R, Creamer D. Rook's Textbook of Dermatology. Ed 9th. New Delhi: Blackwell Publishing Ltd. 2010; pp. 90.1-90.64.
- Hunter J, Savin J, Dahl M. Clinical Dermatology. Ed 3rd. Edinburgh: Blackwell Science. 2002; pp. 216-18.
- Jilani G. Mukhzan ul Hikmat. New Delhi: Oriental publication. 1749; pp. 1224-25.
- Kaminer MS, Gilchrist BA. The many faces of acne. Journal of the American Academy of Dermatol. 1995; 32: 6-14.
- Kamlesh JW, Lakhotiya CL, Milind JU. Skin renewal effect of different extracts of leaves of *Azadirachta indica*. International Journal of PharmTech Research. 2009;1(4):1350-3.
- Kumar N, Kant R, Sinaga M, Yimame B, Belachew T. Preliminary phytochemical screening and in vitro antibacterial evaluation of the leaf and root extract of *Azadirachta indica* Plant. Int J Pharm Front. 2012; 2: 32-41.
- Pal RS, Ariharasivakumar G, Girhepunjhe K, Upadhyay A. In-vitro antioxidative activity of phenolic and flavonoid compounds extracted from seeds of *Abrus precatorius*. Int J Pharm Pharm Sci. 2009; 1(2): 136-40.

- Patel P, Bhalodia Y, Gohil T, Malavia S, Devmurari V. In-vitro antioxidant activity of Azadirachta Indica leaves. J Advances Pharmacy Healthcare Res. 2011; 1(3): 22-7.
- Sachidanand YN, Kumar AB. Treatment of acne vulgaris with new poly herbal formulation. Indian J Dermatol. 2001; 46: 138- 41.
- Sina I. Al Qanoon Fil Tib (Urdu translation by Kantoori G H). Vol 4th. Delhi: Eijaz Publishing House. 2010; pp. 1432.
- Tabasum H, Ahmad T, Anjum F, Rehman H. The effect of Unani antiacne formulation (Zimade Muhasa) on acne vulgaris: A single-blind, randomized, controlled clinical trial. Journal of Pakistan Association of Dermatology. 2016 Dec 2; 24(4): 319-26.
- Tabri AM. Molaajat Buqratiyah (Urdu translation). Vol 2nd. Delhi: CCRUM. 1997; pp. 252-3.
- Tilwari A, Shukla NP, Pathirissery UD. Immunomodulatory activity of the aqueous extract of seeds of Abrus precatorius Linn (Jequirity) in mice. Iranian Journal of Immunology. 2011 Jun 1; 8(2): 96-103.
- Vijaya VT, Srinivasan D, Sengottuvelu S. Wound healing potential of Melia azedarach L. leaves in alloxan induced diabetic rats. Global Journal of Research on Medicinal Plants & Indigenous Medicine. 2012 Jul 1;1(7): 265.
- Wolff K, Johnson RA, Saavedra AP, Roh EK. Fitzpatrick's color atlas and synopsis of clinical dermatology. McGraw-Hill. 2017; 2-7.

